All-in-One ADSL2+ Router with Wireless-N technology

The BiPAC 7800NL is an ADSL2+ Router that offers users affordable expanded wireless coverage and speedy Internet connection. By supporting Internet Protocol, IPv6, this All-in-One Router allows users to make internet connections between existing IPv4 networks and future IPv6 network upgrades when greater security, high quality QoS and larger addressing are required. With an integrated 802.11n Access Point, the BiPAC 7800NL can automatically adopt an optimal connection to deliver smooth, constant signal reception even if obstacles are present. Robust Firewall security is featured to protect Internet access against hacker attacks. The Quality of Service and VLAN enables intelligent steaming for HD video or multiple applications such as music downloads, online gaming, video streaming and file sharing simultaneously.

Optimal Wireless Speeds and Coverage

With an integrated 802.11n Wireless Access Point, this router supports a data rates up to 300Mbps and delivers up to 6 times the speed and 3 times the wireless coverage of an 802.11b/g network device. If the network requires wider coverage, the built-in Wireless Distribution System (WDS) repeater function allows users to expand the wireless network without the need for any external wires or cables.

Jitter-free, Reliable Net Traffic

Quality of Service (QoS) gives full control over outgoing data traffic. Priority can be assigned by the router to ensure that important transmissions like gaming packets, VoIP calls or IPTV / streaming content passes through the router at lightning speed, even when there is heavy Internet traffic. The transfer speed of different types of outgoing data passing through the router is also controlled to ensure that users do not saturate bandwidth with their browsing activities. The VLAN support is also capable of establishing reliable high-speed transmissions for wide bandwidth applications such as IPTV, VOD, or online gaming without consuming bandwidth.

High-speed Internet Access

The BiPAC 7800NL is compliant with worldwide ADSL standards, and supports download rates of up to 12 / 24Mbps using ADSL2 / 2+, 8Mbps using ADSL and an upload rate of up to 1Mbps. The integrated Annex M standard supports ADSL2 / 2+ for higher uploads by doubling the upload data rate. The 4-port Ethernet Switch incorporated into the BiPAC 7800NL enables users to connect to multiple computers or wired-Ethernet devices easily and enjoy blistering LAN transmission for multimedia applications such as interactive gaming, IPTV video streaming and real-time audio.

Simple Setup, Ease of Management

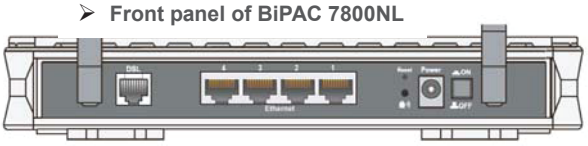
Easy Sign-On (EZSO), WPS push button and Auto-scan ADSL settings allow users to manage the device functions effortlessly! The user-friendly, web-based user interface makes installing and managing the BiPAC 7800NL extremely easy. With support for both DHCP client and server, system administrators can manage IP assignment without having to reconfigure other stations and fitting the router into existing network environments.

Ideal for

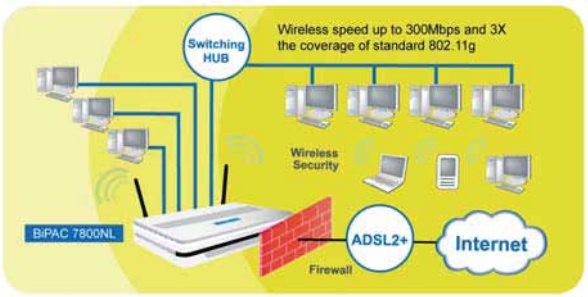
Home and SOHO User

- IPv6 ready (IPv4/IPv6 dual stack)
- Supports Multiple LAN segment for multiple network application
- 4-port 10 / 100Mbps Ethernet switch integrated
- High-speed Internet Access via ADSL2 / 2+; Backward Compatible with ADSL
- 802.11n Wireless Access Point with Wi-Fi Protected Setup (WPS), Wi-Fi Protected Access (WPA-PSK/ WPA2-PSK) and Wired Equivalent Privacy (WEP) support
- Wireless speed up to 300Mbps
- Quality of Service Control for traffic prioritization and bandwidth management
- SOHO Firewall security with DoS Prevention and Packet Filtering
- Universal Plug and Play (UPnP) Compliance
- Dynamic Domain Name System (DDNS)
- Available Syslog
- Ease of Use with Quick Installation Wizard and Auto-scan ADSL settings
- Supports IPTV Application *2
- Easy Sign-On (EZSO)

➢ Front panel of BiPAC 7800NL



➢ Back panel of BiPAC 7800NL



Features & Specifications

ADSL Compliance
- Compliant with ADSL Standard
  - Full-rate ANSI T1.413 Issue 2
  - G.dmt (ITU G.992.1)
  - G.lite (ITU G.992.2)
  - G.hs (ITU G.994.1)
  - ADSL over ISDN / U-R2
- Compliant with ADSL2 Standard
  - G.dmt.bis (ITU G.992.3)
  - ADSL2 Annex M (ITU G.992.3 Annex M) (BiPAC 7800NL A only)
- Compliant with ADSL2+ Standard
  - G.dmt.bis plus (ITU G.992.5)
  - ADSL2+ Annex M (ITU G.992.5 Annex M) (BiPAC 7800NL A only)

Network Protocols and Features
- IPv4 or IPv4 / IPv6 Dual Stack
- NAT, static (v4/v6) routing and RIP-1 / 2
- IPv6 Stateless/ Stateful Address Auto-configuration
- IPv6 Router Advertisement
- IPv6 over PPP
- DHCPv6
- Universal Plug and Play (UPnP) Compliant
- Dynamic Domain Name System (DDNS)
- Virtual Server and DMZ
- SNTP, DNS relay and IGMP proxy
- IGMP snooping for video service
- Management based-on IP protocol, port number and address

Firewall
- Built-in NAT Firewall
- Stateful Packet Inspection (SPI)
- Prevents DoS attacks including Land Attack, Ping of Death, etc.
- Remote access control for web base access
- Packet Filtering (v4/v6) - port, source IP address, destination IP address, MAC address
- URL Content Filtering - string or domain name detection in URL string
- Password protection for system management
- VPN pass-through

Quality of Service Control
- Supports the DiffServ approach
- Traffic prioritization and bandwidth management based-on IP protocol, port number and address

ATM, PTM and PPP Protocols
- ATM Adaptation Layer Type 5 (AAL5)
- Classical IP over ATM (IPoA) (RFC 2225 / RFC 1577)
- Bridged or routed Ethernet encapsulation
- VC and LLC based multiplexing
- PPP over Ethernet (PPPoE)
- PPP over ATM (RFC 2364)
- MAC Encapsulated Routing (RFC 1483 MER)
- OAM F4 / F5

IPTV Applications *2
- Virtual LAN (VLAN)
- Quality of Service (QoS)
- IGMP Snooping & IGMP Proxy
- MLD snooping & proxy
- VLAN MUX support

Wireless LAN
- Compliant with IEEE 802.11n, 802.11g and 802.11b standards
- 2.4 GHz - 2.484 GHz frequency range
- Up to 300Mbps wireless operation rate
- 64 / 128 bits WEP supported for encryption
- WPS (Wi-Fi Protected Setup) for easy setup
- Wireless Security with WPA-PSK / WPA2-PSK support
- WDS repeater function support
- 802.1x radius supported
- Web-based GUI for WLAN on/off switch

Management
- Easy Sign-On (EZSO) and Auto-scan ADSL settings
- Web-based GUI for remote and local management (IPv4/ IPv6)
- Firmware upgrades and configuration data upload and download via web-based GUI
- Embedded Telnet server for remote and local management
- Available Syslog
- Mail Alert for WAN IP changed
- Wake On LAN
- Supports DHCP server / client / relay
- TR-069 *3 supports remote management
- SNMP v1/v2 supports remote and local management

Hardware Specifications
Physical Interface
- WLAN: 2 x 2dbi detachable antennas
- DSL: ADSL port
- Ethernet: 4-port 10 / 100Mbps auto-crossover (MDI / MDI-X) Switch
- Factory default reset button
- WPS push button
- Power jack
- Power switch

Physical Specifications
- Dimensions : 9.04" x 6.10" x 1.46" (229.5mm x 155mm x 37mm)

Power Requirements
- Input: 12V DC, 1A

Operating Environment
- Operating temperature: 0 - 40□
- Storage temperature: -20 - 70□
- Humidity: 20 - 95% non-condensing

Models & Supported Standards
- BiPAC 7800NL A: Annex A and Annex M (Annex A and Annex M: ADSL over POTS)
- BiPAC 7800NL U: Annex B and U-R2 (Annex B and U-R2: ADSL over ISDN)

Notes:
1. The router may require firmware modification for certain ADSL2 / 2+ / Annex M DSLAMs.
2. IPTV application may require subscribing to IPTV services from a Telco / ISP.
3. Only upon request for Telco / ISP tender projects.
4. Specifications in this datasheet are subject to change without prior notice.

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